Amendments to the Claims:

This listing of claims replaces all prior versions, and listings, of claims in the application:

1.   (CURRENTLY AMENDED)   A broadband network comprising:

a hybrid fiber coax (HFC) network having network elements operable for communicating telephony, data, and video signals with customer-premises equipment of a ~~subscriber; and~~ subscribers;

wherein the network elements include a host digital terminal (HDT) for communicating the telephony signals, a cable modem termination system (CMTS) for communicating the data signals, and video equipment for communicating the video signals;

wherein the network elements further include a fiber optics node connected at one end to the HDT, the CMTS, and the video equipment by a fiber optics network and connected at the other end to the customer-premises equipment by coax;

an HFC network manager for monitoring status of the network elements and the customer-premises equipment, for controlling configuration of the network elements and the customer-premises equipment, and for monitoring the configuration of the network elements and the customer-premises equipment;

a service, design, and inventory (SDI) database operable with the HFC network manager for storing data indicative of the configuration of the network elements and the customer-premises equipment, for storing data indicative of assigned capacity of the network elements, and for storing data indicative of physical and logical connections between the HFC network and the customer-premises equipment of the subscribers; and

an online provisioning application link (OPAL) operable with the HFC network manager and the database for automatically provisioning network elements with the customer-premises equipment of the subscribers based on the assigned capacity of the network elements such that the network elements and the customer-premises equipment are logically connected in order to enable communication of telephony, data, and video signals between the HFC network and the customer-premises equipment of the subscribers.

2-3.   (CANCELLED)

4.   (CURRENTLY AMENDED)   The broadband network of claim [[2]] 1 further comprising:

a fault manager having an alarm visualization tool operable with the HFC network manager and the database for generating visual displays of the status and configuration of the network elements and the customer-premises equipment of the subscribers subscriber.

5.   (ORIGINAL)   The broadband network of claim 4 further comprising:

a trouble ticket system operable with at least one of the HFC network manager and the fault manager for generating trouble ticket alerts in response to improper status of at least one of the network elements and the customer-premises equipment.

6.   (ORIGINAL)   The broadband network of claim 5 wherein:

the HFC network manager updates the improper status of the at least one of the network elements and the customer-premises equipment to a proper status after the trouble ticket alert has been addressed.

7.   (ORIGINAL)   The broadband network of claim 4 further comprising:

a trouble ticket system operable with at least one of the HFC network manager and the fault manager for generating trouble ticket alerts in response to improper configuration of at least one of the network elements and the customer-premises equipment.

8.   (ORIGINAL)   The broadband network of claim 7 wherein:

the HFC network manager updates the improper configuration of the at least one of the network elements and the customer-premises equipment to a proper configuration after the trouble ticket alert has been addressed.

9-10. (CANCELLED)

11.   (CURRENTLY AMENDED)   The broadband network of claim [[3]]
1 further comprising:

an order manager operable with the OPAL for monitoring the provisioning of
HFC network elements with customer-premises equipment by OPAL.

12.   (ORIGINAL)   The broadband network of claim 1 wherein:

the HFC network manager uses a rules-based system for monitoring the status
and configuration of the network elements and the customer-premises equipment.

13-14. (CANCELLED)

15.   (CURRENTLY AMENDED)   In a broadband network having a hybrid
fiber coax (HFC) network provided with network elements operable for communicating
telephony, data, and video signals with customer-premises equipment, a network management
system for managing the HFC network, the HFC network management system comprising:

an HFC network manager for monitoring status of the network elements and the
customer-premises equipment, for controlling configuration of the network elements and the
customer-premises equipment, and for monitoring the configuration of the network elements
and the customer-premises equipment;

wherein the network elements include a host digital terminal (HDT) for
communicating the telephony signals, a cable modem termination system (CMTS) for
communicating the data signals, and video equipment for communicating the video signals;

wherein the network elements further include a fiber optics node connected at
one end to the HDT, the CMTS, and the video equipment by a fiber optics network and
connected at the other end to the customer-premises equipment by coax;

a service, design, and inventory (SDI) database operable with the HFC network
manager for storing data indicative of the configuration of the network elements and the
customer-premises equipment, for storing data indicative of assigned capacity of the network
elements, and for storing data indicative of physical and logical connections between the HFC
network and the customer-premises equipment; and

an online provisioning application link (OPAL) operable with the HFC network manager and the database for automatically provisioning network elements with customer-premises equipment based on the assigned capacity of the network elements such that the network elements and the customer-premises equipment are logically connected in order to enable communication of telephony, data, and video signals between the HFC network and the customer-premises equipment.

16-17. (CANCELLED)

18.   (CURRENTLY AMENDED)   The HFC network management system of claim [[16]] 15 further comprising:

a fault manager having an alarm visualization tool operable with the HFC network manager and the database for generating visual displays of the status and configuration of the network elements and the customer-premises equipment.

19.   (ORIGINAL)   The HFC network management system of claim 18 further comprising:

a trouble ticket system operable with at least one of the HFC network manager and the fault manager for generating trouble ticket alerts in response to improper status of at least one of the network elements and the customer-premises equipment.

20.   (ORIGINAL)   The HFC network management system of claim 19 wherein:

the HFC network manager updates the improper status of the at least one of the network elements and the customer-premises equipment to a proper status after the trouble ticket alert has been addressed.

21.   (ORIGINAL)   The HFC network management system of claim 18 further comprising:

a trouble ticket system operable with at least one of the HFC network manager and the fault manager for generating trouble ticket alerts in response to improper configuration of at least one of the network elements and the customer-premises equipment.

22.   (ORIGINAL)   The HFC network management system of claim 21 wherein:

the HFC network manager updates the improper configuration of the at least one of the network elements and the customer-premises equipment to a proper configuration after the trouble ticket alert has been addressed.

23-24. (CANCELLED)

25.   (CURRENTLY AMENDED)   The HFC network management system of claim [[17]] 15 further comprising:

an order manager operable with the OPAL for monitoring the provisioning of HFC network elements with customer-premises equipment by OPAL.

26-30. (CANCELLED)